GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA

STARRED QUESTION NO:152
ANSWERED ON:10.03.2008
LOSS AND DEPLETION OF SOIL
Vijay Krishna Shri

Will the Minister of AGRICULTURE be pleased to state:

(a) whether soil loss and soil depletion have reached serious proportions in the flood- prone States;

(b) whether any monitoring has been done to determine the loss of soil as a result thereof on an annual basis;

(c) if so, the details regarding the worst affected States in terms of soil loss and soil depletion; and

(d) the steps taken to check soil loss and soil depletion alongwith the involvement of Indian Council for Agricultural Research (ICAR) labs therein?

Answer

MINISTER OF AGRICULTURE(SHRI SHARAD PAWAR)

(a) to (d): A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF LOK SABHA STARRED QUESTION NO. 152 DUE FOR REPLY ON 10TH MARCH, 2008.

(a) to (c): The process of soil erosion and its formation is a natural process which is occurring simultaneously in natural eco-system to maintain the equilibrium. The soil erosion by rainwater takes away the productive top soil, resulting in depletion of soil fertility and thereby reducing its productivity. The monitoring of soil loss on some selected watersheds as well as field size catchments for research purposes is being done by Indian Council of Agricultural Research (ICAR). The average rate of soil erosion in the country is 16.4 tonnes per hectare per year which is more than the permissible value of 10.00 tonnes per hectare per annum. Out of total geographical area of about 328.60 million ha, 220.70 million ha. is within the permissible limit of soil erosion in the country. However, about 107.90 million ha. is subjected to high rate of soil erosion. Out of total eroded soil, 61% simply moves from one place to another, nearly 29% is lost permanently to the sea and remaining 10% is deposited in the reservoirs. The soil erosion leads to land degradation in upper reaches of the river system, whereas when deposited at various locations in middle and lower reaches of river systems, it may increase the soil fertility.
The most affected States are Himachal Pradesh, Uttarakhand, Shiwalik hills of Punjab & Haryana, hills of Orissa & Jharkhand, Plains of Uttar Pradesh & Bihar, Coastal areas of Gujarat & Maharashtra, several parts of North − Eastern States & western Rajasthan.

(d): The Indian Council of Agricultural Research (ICAR) has developed several location specific bio-engineering erosion control techniques along with rehabilitation measures (through various agro-forestry/integrated farming system interventions) which are being implemented through different integrated watershed management programmes run by various agencies to check soil loss and soil depletion in the country. Based on the recommendations of ICAR, suitable development measures for prevention of soil loss and soil depletion have been developed and being implemented by Government of India under various Watershed Development Programmes with a view to minimize soil erosion, land degradation and thereby preventing soil depletion & sustaining agricultural production in the country. These programmes are:
(i) National Watershed Development Project for Rainfed Areas (NWDPRA),
(ii) Soil Conservation for Enhancing the Productivity of Degraded Lands in the Catchments of River Valley Project and Flood Prone River (RVP & FPR),
(iii) Reclamation of Alkali Soils (RAS),
(iv) Watershed Development Projects in Shifting Cultivation Areas

(WDPSCA),
(v) Drought Prone Area Programme (DPAP),
(vi) Desert Development Programme (DDP),

(vii) Integrated Wasteland Development Project (IWDP),
(viii) Watershed Development Fund (WDF) and (ix) Externally Aided Projects (EAPs) in the country. Under these programmes, since inception upto end of X Five Year Plan about 50.83 million ha. of lands have been developed as per scheme-wise details annexed. In addition to above, for sustaining the soil fertility of depleted soil, Government of India is implementing a Centrally Sponsored Scheme on Balanced & Integrated Use of Fertilizer through Macro Management of Agriculture for promoting soil test-based application of chemical fertilizers and strengthening of soil testing facilities as well as for setting up of compost plants for conversion of

biodegradable city waste into organic manure. A National Project on Organic Farming has also been launched as a pilot project in October 2004 for production, promotion, certification and market development of organic farming in the country.